

REMARKS

Claims 11 and 17 through 36 are pending in this Application. Claims 21 through 36 have been added. Care has been exercised to avoid the introduction of new matter. Indeed, adequate descriptive support for the present amendment should be apparent throughout the originally filed disclosure. Applicant submits that the present Amendment does not generate any new matter issue.

Information Disclosure Statement

The Examiner's attention is invited to the Information Disclosure Statement (IDS) filed concurrently herewith. The IDS lists U.S. Patent No. 4,994,294 issued to Gould, which was cited in the Search Report and believed to be cited at page 1, line 36, of PCT Application WO 96/36233 (WO'233), the Examiner's primary reference applied in the rejections imposed in the Office Action dated March 16, 2004.

Summary of the Invention

Prior to addressing the issues generated in the March 16, 2004 Office Action, it is helpful to understand the present invention "as a whole". This is because the rejections imposed by the Examiner are under 35 U.S.C. § 103 and that statutory provision speaks in terms of "... the subject matter as a whole ..." – not differences between the claimed invention and the prior art. Indeed, it is legally erroneous to focus on differences between a claimed invention and the prior art rather than on the **subject matter as a whole**. *Gillette Co. v. S. C. Johnson & Son, Inc.*, 919 F.2d 720, 16 USPQ2d 1923 (Fed. Cir. 1990); *Panduit Corp. v. Dennison Mfg. Co.*, 774 F.2d 1082, 227 USPQ 337 (Fed. Cir. 1985).

It is well settled that the subject matter as a whole includes: (1) recognition of a problem in the art; (2) the problem to which a claimed invention is addressed; and (3) the advantages resulting from the invention. *Jones v. Hardy*, 727 F.2d 1524, 220 USPQ 1021 (Fed. Cir. 1984). With this judicial mandate in mind, Applicants would invite the Examiner's attention to paragraph [0004] of the written description of the specification wherein it is revealed, and remains unrefuted on this record, that conventional wisdom in the art related to massaging bodies of liquid-injected meat was to conduct massaging action at a relatively low temperature maintained by circulating a coolant, such as a glycol/water solution at about 23°F. But Applicant **discovered problems** attendant upon such a conventional practice of massaging bodies of liquid-injected meat at a relatively low temperature. These problems are disclosed in paragraphs [0008] and [0009] of the written description and include, for example, impedance of effective massaging by virtue of water binding to proteins released from the meat to form a compound which may be exuded and form a coating or internal barrier, thereby impeding penetration, absorption and/or dispersion of the treatment solution. Other problems include the inability to develop uniform internal coloration, reduction of friction and breakdown of treating solutions, such as polyphosphates and nitrites by enzymes in the meat thereby preventing effective and efficient utilization of such additives. Applicants discovery of such problems attendant upon conventional practices of massaging bodies of liquid-injected meat at a low temperature have **not** been disputed on this record and must, therefore, be accepted. *In re Clinton*, 527 F.2d 1226, 188 USPQ 365 (CCPA 1976).

Applicant's solution to the problems comprises a method and apparatus wherein bodies of liquid-injected meat are selectively heated and cooled during agitation (massaging), as at a temperature sufficient for optimum distribution of ingredients in a muscle system, e.g., between

45°F and 60°F. Embodiments include circulating a temperature regulating liquid through a jacket about the massaging vessel, to implement the selective heating and cooling. The notion of selectively heating bodies of meat during massaging is conspicuously absent from the prior art.

Accordingly, prior to addressing the rejections imposed by the Examiner, Applicant would stress the following facts:

1. It is undisputed that Applicant discovered problems attendant upon conventional practices of massaging bodies of liquid-injected meat at a relatively low temperature;
2. The problems attendant upon conventional practices of massaging bodies of liquid-injected meat at a low temperature addressed and solved by Applicant are not even a blip on the radar screens of the applied references; and
3. The applied prior art, taken singly or in combination, fails to disclose or suggest the concept of elevating the temperature **while** massaging bodies of liquid-injected meat injected with a liquid to effect rapid, thorough and uniform distribution of the liquid within the meat and substantially reduced formation of a protein-water film on the surface of the meat.

Claim 11 was rejected under 35 U.S.C. § 103 for obviousness predicated upon WO'233 in view of Horn et al., Burkhardt and DE 3119496A (DE'496).

In the statement of the rejection the Examiner **admitted** that WO'233 does not disclose the use of a jacket or temperature sensor as set forth in claim 11. However, because Horn et al. employ a jacket the Examiner concluded that one having ordinary skill in the art would have

been led to reconstruct the apparatus disclosed by WO'233 by incorporating a jacket for cooling. The Examiner further concluded that one having ordinary skill in the art would have been led to modify the apparatus disclosed by WO'233 by incorporating a temperature sensor, because Burkhart employs a temperature sensor, and in so doing, use the particular temperature sensor disclosed by DE'496. This rejection is traversed as legally erroneous.

There is no Motivation

In imposing a rejection under 35 U.S.C. § 103, the Examiner is required to make clear and particular factual findings as to a **specific** understanding or **specific** technological principal and then explain **why**, based upon such factual findings, one having ordinary skill in the art would have been **realistically** motivated to modify particular prior art, in this case the **specific** apparatus disclosed by WO'233, **repeat the specific apparatus disclosed by WO'233**, to arrive at the claimed invention. *Teleflex Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 63 USPQ2d 137; *Ecolochem Inc. v. Southern California Edison, Co.*, 227 F.3d 1361, 56 USPQ2d 1065 (Fed. Cir. 2000); *In re Kotzab*, 217 F.3d 1365, 55 USPQ 1313 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). Applicant would emphasize that what is required is a fact-based analysis – **not generalizations**. *Ecolochem Inc. v. Southern California Edison supra*; *In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998). In applying these legal tenets to the exigencies of this case, Applicant submits that the Examiner did not establish a *prima facie* case of obviousness for lack of the requisite realistic motivational element.

Specifically, the Examiner's primary reference WO'233 is addressed to mechanical massaging of bodies of meat. That is where the similarity between the claimed invention and the

primary reference WO'233 ends. Adverting to page 1 of WO'233, and again this is the **primary** reference relied upon by the Examiner, it is disclosed that **heat is generated during mechanical massaging**. In fact, so much heat is generated that the temperature must be **lowered, not elevated** as in the claimed invention, but **lowered**.

WO'233 goes on to explain that conventional practices directed to **lowering**, again not elevating but lowering, the temperature during mechanical massaging comprise the use of a cooling jacket. However, WO'233 explains that such cooling jackets are problematic because of the formation of an ice layer which generates sanitary issues. WO'233 explains that other conventional approaches to this **heating problem** involved the use of external insulation which undesirably increased cost. Evaporation, another conventional attempt, is undesirable because of meat contacting a gas.

The solution and invention disclosed in WO'233 is summarized at page 2, lines 17 et. seq., and involves the use of axially extending channels through which the fluid is passed for temperature reduction. Simply put WO'233 **teaches away from**, and discloses problems attendant upon, the use of a cooling jacket. Further, WO'233 clearly teaches away from the concept of elevating temperature while massaging meat. In fact, WO'233 is directed to the problem of alleviating the heat generated during massaging. It cannot be gainsaid that on page 3 of WO'233, lines 26 through 30, mention is made of a heating medium. That heating medium is only to bring the temperature up to a "optimum starting temperature" – not **during** massaging when heat is generated. This interpretation is also consistent with the evulgation appearing at page 5 of WO'233, lines 4 through 9.

Thus, the Examiner has served up a primary reference which **teaches away** from the use of an apparatus having a jacket through which a temperature regulating fluid is circulated, and

teaches away from elevating the temperature **during** meat massaging. Undaunted by the teachings of the primary reference WO'233, the Examiner says that one having ordinary skill in the art would have been motivated to actually **proceed against** the express disclosure of WO'233 and reconstruct the apparatus by providing a jacket for circulating a temperature regulating fluid in view of Horn et al. **Why?** The Examiner says "... both are directed to meat processing devices ..." (page 3 of the March 16, 2004 Office Action, lines 9 and 10). This is nothing more than a generalization which is judicially condemned. *Ecolochem Inc. v. Southern California Edison, Co., supra; In re Rouffet, supra.*

It cannot be gainsaid that Horn et al. disclose a vacuum meat marinating machine with a short vacuum massage cycle comprising a paddle agitator and a cooling jacket. Of course, WO'233 does not employ a paddle agitator, but a rotatable massager drum. That is another difference.

The use of a cooling jacket, *per se*, is not new. Indeed, as previously pointed out, WO'233 recognizes the conventional use of a cooling jacket. Again, the Examiner's attention is invited to page 1 of his primary reference WO'233, lines 12 et seq., wherein mention is made of conventional containers provided with a cooling jacket. But it is also disclosed that such is undesirable. **Clearly, WO'233 teaches away from a cooling jacket.** Under such circumstances, the Examiner committed clear legal error in concluding that one having ordinary skill in the art would have been motivated to go against the express teachings of WO'233 and provide a cooling jacket, because WO'233 clearly does not want a cooling jacket. It has been repeatedly held that one having ordinary skill in the art cannot be considered realistically motivated to modify in a reference in a manner inconsistent with the disclosure. *In re Fritch,*

972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992); In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); In re Schulpen, 390 F.2d 1009, 157 USPQ 52 (CCPA 1968).

As also admitted by the Examiner, WO'233 does not disclose or suggest the use of a temperature sensor. The Examiner, however, concluded that because Burkhart employs a temperature sensor, then one having ordinary skill in the art would have been motivated to use a temperature sensor in the device disclosed by WO'233 and, in fact, the particular thermometer disclosed by DE'496. But Burkhart and DE'496 relate to **cooking food**. These references do not relate to massaging bodies of meat. Accordingly, Burkhart and De '496 on the one hand and WO '233 on the other hand, relate to non-analogous arts. The Examiner says that WO '233 and Burkhart relate to heating bodies of meat. But Burkhart relates to **cooking** food, not massaging bodies of meat. Clearly, the Examiner states the issue too broadly. See *Ex parte Dussand, USPQ2d 1818 (BPAI 1988)*.

It strains credulity to conclude that one having ordinary skill out in the real world would have been realistically motivated to modify the apparatus disclosed by WO'233 by providing a temperature sensor, only because temperature sensors have been used for cooking. The Examiner has done nothing more than identify features of the claimed invention in disparate references and then announced the obviousness conclusion. This approach is legally erroneous. *In re Kotzab, supra; Grain Processing Corp. v. American-Maize Products Co., 840 F.2d 902, 5 USPQ2d 1788 (Fed. Cir. 1988).*

Applicant would stress that WO'233 seeks to remove **heat generated during** massaging by cooling. There is, therefore, no need for a temperature sensor. If the heating fluid is

employed to achieve a “starting temperature” (page 3 of WO’233, line 30), there appears to be no need for a temperature sensor to maintain an elevated temperature during massaging.

Consistent with the above arguments, Applicant would invite the Examiner’s attention to *Ecolochem Inc. v. Southern California Edison, Co., supra* wherein, at 1076, the Court required evidence to be presented that:

a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited references for combination in the claimed manner.

Clearly, the applied prior art fails to recognize the problems attendant upon massaging bodies of liquid-injected meat at low temperatures. Accordingly, the holding in *Ecolochem Inc. v. Southern California Edison, Co., supra*, as well as the holdings in *In re Rouffet, supra* and *In re Kotzab, supra* support the conclusion that the requisite motivational element has not been established.

Insufficient Facts.

The Examiner appears to presume that the apparatus disclosed by WO’233 contains means for selectively heating and cooling the vessel “**during** the agitation of the bodies of meat therein”, as set forth in claim 11. However, as previously pointed out, the closest WO’233 comes is to indicate that a heating fluid may be used to obtain a desired **starting** temperature. It is not apparent and the Examiner has failed to identify any teaching in WO’233 which discloses or suggests the notion of selectively **heating** the vessel **during agitation** of the meat therein vis-à-vis achieving a starting temperature, particularly since WO’233 discloses that heat is generated **during** massaging and such heat must be removed by cooling. The Examiner’s attempt to stick in a temperature sensor, because temperature sensors are used when cooking, cannot make up for

the absence of any teaching in WO'233 with respect to heating during agitation and the clear teaching away from doing so.

There is no prima facie case

Based upon the foregoing Applicants submit that a *prima facie* basis to deny patentability to claim 11 has not been established. Moreover, there is an abundance of evidence of **nonobviousness** which the Examiner has apparently declined to consider. This failure, in itself, constitutes legal error, because all evidence relating to the ultimate legal conclusion of obviousness under 35 U.S.C. § 103 must be given consideration. *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995); *Stratoflex Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

Evidence of Nonobviousness.

Initially, it is not disputed on this record that Applicant discovered numerous problems attendant upon the conventional practices of massaging bodies of liquid-injected meat at a relatively low temperature. Applicants discovery of such problems is, in itself, an indicium of **nonobviousness**. *Jones v. Hardy, supra*; *In re Spinnoble*, 405 F.2d 578, 160 USPQ 237 (CCPA 1969).

It is also well settled that the problem addressed and solved by a claimed invention must be given consideration in resolving the ultimate legal conclusion of obviousness under 35 U.S.C. § 103. *North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 28 USPQ2d 1333 (Fed. Cir. 1993); *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 15 USPQ2d 1321 (Fed. Cir. 1990); *In re Newell*, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989); *Jones v.*

Hardy, supra; In re Nomiya, 509 F.2d 566, 184 USPQ 607 (CCPA 1975). The problems addressed and solved by the claimed invention, as previously pointed out, relate to the impedance of effective massaging and effective utilization of treating solutions (paragraphs [0008] and [0009] of the written description). None of the applied references discloses or expresses any recognition of such problems. Under such circumstances, the problems addressed and solved by the claimed invention must be given consideration as a patent indicium of **nonobviousness**.

Further, and quite significantly, as previously pointed out the primary reference WO'233 expressly **teaches away**, repeat **teaches away**, from the use of a cooling jacket. WO'233 also **teaches away** from heating during massaging, because, according to the disclosed technique, heat is generated during massaging and steps must be taken "... to counteract such heating" (page 1, lines 13 through 15). These **teachings away** from two aspects of the claimed invention constitute another potent indicium of **nonobviousness**. *In re Bell, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); Specialty Composites v. Cabot Corp., 845 F.2d 981, 6 USPQ2d 1601 (Fed. Cir. 1988); In re Hedges, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986); W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); In re Marshall, 578 F.2d 301, 198 USPQ 344 (CCPA 1978).*

Conclusion.

Based upon the foregoing it should be apparent that the Examiner did not establish a *prima facie* basis to deny patentability to the claimed invention under 35 U.S.C. § 103 for lack of the requisite facts and want of the requisite realistic motivation. Moreover, upon giving due consideration to the evidence of **nonobviousness** of record, the conclusion appears inescapable

that one having ordinary skill in the art would **not** have found the claimed invention **as a whole** obvious within the meaning of 35 U.S.C. § 103. *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). Applicant, therefore, submits that the imposed rejection of claim 11 under 35 U.S.C. § 103 for obviousness predicated upon WO'233 in view of Horn et al., Burkhart and DE'496 is not factually or legally viable and, hence, solicits withdrawal thereof.

Claims 17 through 18 were rejected under 35 U.S.C. § 103 for obviousness predicated upon WO'233 in view of Burkhart and Ludwig.

In the statement of the rejection the Examiner concluded that one having ordinary skill in the art would have been motivated to modify whatever apparatus can be said to have been suggested by the combined disclosures of a meat massaging apparatus (WO'233) and a cooking vessel (Burkhart) by incorporating the jacket and rotary paddle of Ludwig, and to provide means for torque control as in Ludwig. This rejection is traversed as factually and legally erroneous.

Firstly, as previously pointed out, WO'233 neither discloses nor suggests, and in fact **teaches away** from, heating during agitation of the bodies of meat. This is because according to the disclosed method, heat is generated during massaging and that heat must be removed by cooling.

Secondly, WO'233 expressly **teaches away** from a temperature control jacket as specified in claim 17. It is legally erroneous to conclude that one having ordinary skill in the art would have been motivated to modify the apparatus disclosed by WO'233 in a manner inconsistent with the disclosure. *In re Fritch, supra; In re Gordon, supra; In re Schulpen, supra.* Moreover, it is inconceivable that one having ordinary skill in the art would have been realistically motivated to modify the apparatus disclosed by WO'233 by providing a rotary

paddle, let alone programming means for raising the temperature of the bodies of meat in the massaging drum to a predetermined level while controlling the torque of the rotary paddle. This is because the device disclosed by WO'233 does **not** contain a rotary paddle as claimed. The device disclosed by WO'233 is a rotatable massager – not a stationary massage drum containing a rotary paddle. The Examiner failed to provide any factual basis upon which to predicate the conclusion that one having ordinary skill in the art would have been realistically motivated to completely undue the apparatus disclosed by WO'233 by providing a cooling jacket and by converting it into a stationary massager with a rotating paddle.

Moreover, as the notion of achieving a predetermined elevated temperature “while massaging said bodies of meat with a controlled torque of said rotary paddle” is alien to the teachings of WO'233, it strains credulity to conclude that one having ordinary skill in the art would have been realistically motivated to modify the apparatus disclosed by WO'233 to provide programming means as in the claimed invention. Again, merely because WO'233 suggests an elevated starting temperature, does not mean one having ordinary skill in the art would have been motivated to achieve a predetermined elevated temperature “while massaging”. Again, that is because WO'233 discloses the generation of heat during massaging which must be counteracted by cooling during massaging.

Moreover, as previously argued, there is an abundance of nonobviousness indicia of record including Applicant's discovery of problems attendant upon conventional practices of massaging bodies of liquid-injected meat at a low temperature, which problems were unappreciated by the applied prior art, and the conspicuous **teaching away** from the use of a cooling jacket and elevating the temperature during massaging by the primary reference to WO'233. Accordingly, not only has the Examiner failed to establish a *prima facie* case of

obviousness under 35 U.S.C. § 103 for lack of the requisite factual basis and want of the requisite realistic motivation, but the potent indicia of **nonobviousness** compel the conclusion that one having ordinary skill in the art would not have found the claimed invention as a whole obvious within the meaning of 35 U.S.C. § 103. *In re Piasecki, supra*.

Applicant, therefore, submits that the imposed rejection of claims 17 and 18 under 35 U.S.C. § 103 for obviousness predicated upon WO'233 in view of Burkhart and Ludwig is not factually or legally viable and, hence, solicits withdrawal thereof.

Claims 19 and 20 were rejected under 35 U.S.C. § 103 for obviousness predicated upon WO'233 in view of Ludwig, Burkhart and DE'496.

This rejection is traversed. Specifically, claims 19 and 20 depend from claim 17. Applicant incorporates herein the arguments previously advanced in traversing the imposed rejection of claim 17 under 35 U.S.C. § 103 for obviousness predicated upon WO'233 in view of Ludwig and Burkhart. The additional reference to DE'496 does not cure the argued deficiencies in the attempted combination of WO'233, Ludwig and Burkhart.

Applicant, therefore, submits that the imposed rejection of claims 19 and 20 under 35 U.S.C. § 103 for obviousness predicated upon WO'233 in view of Ludwig, Burkhart and DE'496 is not factually or legally viable and, hence, solicits withdrawal thereof.

New claims 21 through 36.

New claims 21 through 36 are free of the applied prior art for reasons which should be apparent from those advanced in traversing the imposed rejections of claims 11 and 17 through 20. Specifically, the applied prior art neither discloses nor suggests a vessel as defined in claim

21 comprising means for selectively **heating** and cooling the vessel **while agitating the bodies of meat therein**, and which vessel contains a jacket for circulating a liquid therethrough to effect the recited selective heating and cooling of the vessel **while** agitating the bodies of meat. Again, WO'233 **teaches away** from heating while agitating and **teaches away** from the use of a jacket for circulating a temperature regulating liquid therethrough. Applicant further separately argues the claims dependent upon claim 21 based upon the limitations expressed therein.

Independent claim 20 is directed to an apparatus which contains means for maintaining bodies of meat during agitation at a predetermined elevated temperature sufficient to achieve recited functions. WO'233 neither discloses nor suggests the notion of maintaining the bodies of meat during agitation at a predetermined elevated temperature. In fact, WO'233 discloses the necessity to remove heat during agitation by cooling – not to heat during agitation. Applicant also separately argues the patentability of claims 30 through 32 individually based upon limitations expressed therein.

Independent claim 33 is directed to a vessel which contains means for maintaining the bodies of meat during agitation in a particular temperature range of 45°F to 60°F. The notion of maintaining bodies of meat during agitation at 45°F to 60°F is conspicuously absent from any of the applied references. Applicant would again note that WO'233 teaches away from heating during agitation by requiring removal of heat during agitation by cooling.


Based upon the foregoing it should be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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